Application No. 10/758,227

Reply to Office Action of June 15, 2009

**AMENDMENTS TO THE CLAIMS** 

Please amend the claims as follows:

**Listing of Claims:** 

Claims 1-16 (Cancelled).

Claim 17 (New): A radio control device for controlling a plurality of base stations,

comprising:

a channel assignment request reception unit configured to receive a channel

assignment request;

a first channelization code selection unit configured to select a first channelization

code for a mobile station for a first frequency, based on a scrambling code of the first

frequency;

a second channelization code selection unit configured to select a second

channelization code for the mobile station for a second frequency, based on a scrambling

code of the second frequency;

an assignment unit configured to assign the channelization code selected by either the

first or second channelization code selection unit to the mobile station; and

a control unit configured to control the first and second channelization code selection

units, the control unit configured to

(a) instruct the first channelization code selection unit to use a primary

scrambling code belonging to the first frequency to look for an unused channelization code,

(b) instruct the second channelization code selection unit to use a primary

scrambling code belonging to the second frequency to look for an unused channelization

code, in a case the first channelization code selection unit has determined that there is no

unused channelization code for the primary scrambling code for the first frequency, and

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(c) instruct the first channelization code selection unit to use a secondary scrambling code belonging to the first frequency to look for an unused channelization code, in a case the second channelization code selection unit has determined that there is no unused channelization code for the primary scrambling code for the second frequency.

Claim 18 (New): The radio control device according to Claim 17, wherein the control unit is further configured to

(d) instruct the second channelization code selection unit to use a secondary scrambling code belonging to the second frequency to look for an unused channelization code, in a case the first channelization code selection unit has determined that there is no unused channelization code for the secondary scrambling code for the first frequency.

Claim 19 (New): The radio control device according to Claim 17, wherein the control unit sequentially performs the steps (a), (b) and (c), and in a case the unused channelization code is found by either the first or second channelization code selection units, the control unit stops instructing the first and second channelization code selection units to look for a channelization code, and

the assignment unit assigns the unused channelization code found by either the first or second channelization code selection unit.

Claim 20 (New): The radio control device according to claim 17, wherein the first and second frequencies are associated with a first and second channelization code trees forming first and second channelization code sets generated by Orthogonal Variable Spreading Factor (OVSF), and the first and second channelization codes are part of the first and second channelization code sets, respectively.

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Claim 21 (New): A radio control device for controlling a plurality of base stations, comprising:

channel assignment request reception means for receiving a channel assignment request;

first channelization code selection means for selecting a first channelization code for a mobile station means for a first frequency, based on a scrambling code of the first frequency;

second channelization code selection means for selecting a second channelization code for the mobile station means for a second frequency, based on a scrambling code of the second frequency;

assignment means for assigning the channelization code selected by either the first or second channelization code selection means to the mobile station means; and

control means for controlling the first and second channelization code selection means, the control means

- (a) instructing the first channelization code selection means to use a primary scrambling code belonging to the first frequency to look for an unused channelization code,
- (b) instructing the second channelization code selection means to use a primary scrambling code belonging to the second frequency to look for an unused channelization code, in a case the first channelization code selection means has determined that there is no unused channelization code for the primary scrambling code for the first frequency, and
- (c) instructing the first channelization code selection means to use a secondary scrambling code belonging to the first frequency to look for an unused channelization code, in a case the second channelization code selection means has determined that there is no unused channelization code for the primary scrambling code for the second frequency.

Claim 22 (New): The radio control device according to Claim 21, wherein the control means is further

(d) instructing the second channelization code selection means to use a secondary scrambling code belonging to the second frequency to look for an unused channelization code, in a case the first channelization code selection means has determined that there is no unused channelization code for the secondary scrambling code for the first frequency.

Claim 23 (New): The radio control device according to Claim 21, wherein the control means sequentially performs the steps (a), (b) and (c), and in a case the unused channelization code is found by either the first or second channelization code selection means, the control means stops instructing the first and second channelization code selection means to look for a channelization code, and

the assignment means assigns the unused channelization code found by either the first or second channelization code selection means.

Claim 24 (New): The radio control device according to claim 21, wherein the first and second frequencies are associated with a first and second channelization code trees forming first and second channelization code sets generated by Orthogonal Variable Spreading Factor (OVSF), and the first and second channelization codes are part of the first and second channelization code sets, respectively.

Claim 25 (New): A radio control method for controlling a plurality of base stations, the method performed on radio control device, comprising the steps of:

(a) receiving a channel assignment request;

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(b) instructing a first channelization code selection unit by a control unit to use a primary scrambling code belonging to a first frequency to look for an unused channelization code;

(c) instructing a second channelization code selection unit by the control unit to use a primary scrambling code belonging to a second frequency to look for an unused channelization code, in a case said step (b) has determined that there is no unused channelization code for the primary scrambling code for the first frequency;

(d) instructing the first channelization code selection unit by the control unit to use a secondary scrambling code belonging to the first frequency to look for an unused channelization code, in a case said step (c) has determined that there is no unused channelization code for the primary scrambling code for the second frequency; and

(e) assigning the channelization code that was found by either the first or second channelization code selection units to a mobile station.

Claim 26 (New): The radio control method according to Claim 25, further comprising the step of:

(f) instructing the second channelization code selection unit by the control unit to use a secondary scrambling code belonging to the second frequency to look for an unused channelization code, in a case said step (d) has determined that there is no unused channelization code for the secondary scrambling code for the first frequency.

Claim 27 (New): The radio control device according to Claim 25, wherein the control unit sequentially performs the steps (b), (c) and (d), the method further comprising the steps of:

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- (g) ceasing instructing the first and second channelization code selection units to look for a channelization code, and
- (h) assigning the unused channelization code found by either the first or second channelization code selection unit, as soon as the unused channelization code is found.